T 36558 Timber Reserve 19099

RESERVE No. 19099 (Timber) AREA 217 ± 0.4 ha.

Land District Williams Litho Koolberrin 1.50,000 (386/80)

Location No. 14174

Reason for Survey Requested to do the survey in order that it might be determined whether or not this reserve would make a suitable nature reserve.

Personnel K. J. Wallace Method Vehicle and foot

Dates of Inspection and Weather Conditions This reserve was inspected over three consecutive days.
7/12/78 Temp. 33°c Winds east to north-east, gusting to 20 knots, humid conditions.
8/12/78 Temp. 25-30°c Winds north-east, less than 5 knots, later in the day gusting to 20 knots, north-east to north-west. Cloud 50-80% cover. Humid conditions with thunderstorm activity giving a brief shower of rain in the afternoon.
9/12/78 Temp. 20-25°c Winds south-west, less than 8 knots. Cloud cover 50-60%.

Adjoining Land Fenced farmland abuts directly onto the eastern, western and southern boundries of the reserve. All fences are in good condition except for several points in the southern fence that would allow stock to wander onto the reserve. No stock are at present held on the farmland immediately south of the reserve. A gravel road runs along the northern boundary of the reserve, and north of this there is farmland (adequately fenced).

Damage or Degradation No significant exotic (floral) invasion of the reserve was seen during the survey. Small amounts of rubbish have been dumped on the reserve at several locations. Approximately 300 metres from the northern boundary on the eastern edge of the reserve a camp-site exists and camping has probably occured there in the last 18 months.
Within the last three or four months about six Eucalyptus astringens have been cut from within association 3b(see attached map).

Fire A portion of this reserve has been burnt (see map), within the last eight years. A variety of species are regenerating on the burnt area and many, but not all, have produced fruit.

Improvements Along the eastern, western and southern perimeters a portion of the reserve was cleared when fences were constructed. At no point does this clearing attain a width of 6 metres, and at some points on the southern and eastern boundaries a vehicle is barely able to pass between the farmer's fence and the vegetation. The appearance of the "break" along the western boundary suggests that it has been occasionally maintained by the adjoining farmer.
Tracks that have been cut through the reserve are marked on the attached map. Except for the track which approximates the center of the reserve (running north-south), these tracks have fallen into disuse. The "central" track is used regularly by a farmer whose homestead is situated to the south of the reserve. I talked to a farm labourer from this holding and as far as he is aware it is the only route between the main gravel road to the north and the homestead. However the labourer has only recently begun to work in the area.

Soils Several laterite ridges occur on the reserve, and they are marked on the attached map. The surface soils range from white sand, and white sand with various admixtures of gravel; to sandy, light-brown loam and lesser amounts of light-brown loam.

Plant Formations Heaths are the predominant formation on the reserve, but there are also significant amounts of mallee and woodland. The attached vegetation map indicates the approximate boundaries of the major associations. An aerial photograph was not used to prepare the vegetation map, therefore the map can be taken only as a rough guideline to the location of vegetation types. Numbers used below relate directly to the numbers used on the vegetation map.

1a. A closed-heath consisting predominantly of Dryandra sp., Eremaea ? beaufortioides, Isopogon teretifolius, Melaleuca "scabra" M. uncinata, Petrophile ericifolia and P. propinqua over an ephemeral native herbland.

1b. An area intermediate between 1a and 2 consisting of an open-scrub of Melaleuca uncinata or Leptospermum erubescens over Calytrix sp. with patches of mallee (Eucalyptus eremophila and E. spp.) over an ephemeral native herbland.

2. Low open-forest of Eucalyptus eremophila, Eucalyptus sp. over open-scrub of Melaleuca uncinata over ephemeral native herbland.

3a. Low open-forest of Eucalyptus astringens over open-scrub of Melaleuca sp. over ephemeral native herbland.

3b. Eucalyptus astringens - E. longicornis woodland to open-forest over tall open-shrubland over ephemeral native herbland. (PLATE 1)

4a. Open-woodland of Eucalyptus wandoo over tall open-shrubland of Melaleuca uncinata over low open-shrubland of Hakea sp. and Oxylobium parviflorum.

4b. Open-woodland to low open-woodland of Eucalyptus wandoo over open-scrub to open-heath of Leptospermum erubescens or Melaleuca uncinata or Hakea sp. over ephemeral native herbland. Other species present include Dryandra sp. and Hakea sp. (PLATE 2)

5. Undescribed

6. Open-woodland to woodland of E. salmonophloia over intermitten patches of low woodland to low open-forest of mallees including E. eremophila, E. conglobata ? and E. spp. over low open-shrubland of Melaleuca sp. over ephemeral native herbland. (PLATE 3)

7. Tall, open-shrubland of Leptospermum roei over a closed-heath of Petrophile ericifolia, Hakea incrassata and Banksia baueri over ephemeral native herbland. Other species present included Casuarina humilis, Adenanthos sp., Hakea crassifolia, Hakea sp., Baeckia sp. and Banksia violacea. (PLATE 4)

8. This location lies in the burnt area. Tall open-shrubland of Acacia sp. over open-heath of Leptospermum erubescens, Hakea incrassata, H. crassifolia, Dryandra sp., Eremaea ? beaufortioides and Grevillia sp. over ephemeral native herbland. Other species present include Verticordia spp., Hakea baxteri, Hakea sp. and Casuarina humilis. (PLATE 5)

... vegetation here is

121
12

10. Open-heath complex consisting predominantly of Eremaea? beaufortioides, Hakea baxteri, H. ferruginea, Dryandra sp., D. pteridifolia, Banksia sphaerocarpa and Petrophile sp. over ephemeral herbland.

11. Open mallee scrub of Eucalyptus eremophila, E. conglobata ? and Eucalyptus sp. over open-scrub of Melaleuca uncinata over ephemeral native herbland.

12. Closed-scrub of Melaleuca uncinata over ephemeral native herbland.

13. Low open-forest of mallee (Eucalyptus spp.)

14. Tall open-scrubland of mallees (Eucalyptus eremophila, Eucalyptus sp.) over closed-scrub of Melaleuca uncinata over a low open-scrubland of Oxylobium parviflorum and Hakea sp. over an ephemeral sedge herbland.

15. Open mallee scrub of Eucalyptus eremophila, E. conglogata ?, E. transcontinentalis ? and E. spathulata ? var. grandiflora over open-scrub of Melaleuca uncinata over ephemeral native herbland. (PLATE 6)

16a. Open-heath of Dryandra sp., Hakea incrassata, H. crassifolia, Eremaea ? beaufortioides, Petrophile sp., Verticordiassp., Lysinema ciliatum and Melaleuca "scabra" over an ephemeral native herbland.

16b. Tall open-shrubland of Eucalyptus albida ? (mallee) over an open-heath similar to that described in 16a.

17. Low open-forest of Eucalyptus longicornis, E. eremophila, E. ovularis ?, E. calcygona and Eucalyptus sp. over open-scrub of Melaleuca uncinata or Melaleuca sp. The adjacent area has a similar overstorey, but the understorey is dominated by either a low shrubland of M. uncinata or a low open-shrubland of Daviesia ? sp. (PLATE 7)

18. Low open-forest of Eucalyptus eremophila and Eucalyptus spp. over closed-heath to closed-scrub of Melaleuca uncinata and Hakea sp.

19. Woodland of Eucalyptus wandoo (occasional E. salmonophloia) or low open-forest of Eucalyptus spp. (mallees) over closed-scrub of Melaleuca uncinata and Hakea sp. Adjacent to this site there occur areas of E. wandoo and E. astringens over low open-shrubland.

Other Plant Species Recorded

Acacia pulchella
Calothamnus quadrifidus
Hakea trifurcata
Lambertia inermis
Leptospermum spinescens
Conostylis sp.
Casuarina acuaria ?
C. campestris
C. acutivalvis
Beaufortia micrantha ? var. empetrifolia
Callitris roei

Plant species were identified by using "How to Know Western Australian Wildflowers" parts I, II and III by W. E. Blackall and B. J. Grieve, and "Eucalypts of the Western Australian Goldfields" by G. M. Chippendale. In some cases staff of the W.A.W.R.C. assisted with identifications.

...RIDGE FILE NO. 645/77

for 26

...SED GRAVEL RESERVE - RESERVE NO. 19099 (TIMBER)

In my report of December 21, I recommended that the purpose of the above Reserve be changed to Conservation of Flora and Fauna. However, the Kulin Shire Council want an area of the Reserve set aside for the purpose of gravel removal, and the Shire Clerk, Mr. Lyle Treloar , has indicated that the area in which they are interested is approximately 20 ha in area and lies in the north west corner of the Reserve (see attached map). This area was inspected on January 8, 1980.

The surface soils within the proposed Gravel Reserve consist mainly of sand, and sand with various admixtures of gravel. In some areas gravel lies within 30 cm of the soil surface, although in other areas the shape of the terrain indicates that deep sand may be present. Most of the gravel appears to lie in weak ridges along the northern and southern portions of the proposed Gravel Reserve.

Measurements made during the present inspection suggest that the area of the proposed Gravel Reserve is approximately 26 ha. While it would be preferable that no gravel be removed from the Reserve, I recommend that in the present circumstances workers from the Kulin Shire Council be given approval to remove gravel from the area delineated on the attached map. I do not consider that it is appropriate for any area to be excised from the Reserve for gravel, as this may not be conducive to proper management of the extraction process. Furthermore if a gravel reserve was created, this Department would be unable to control activities such as rubbish dumping.

RECOMMENDATIONS

Given that Reserve 19099 (Timber) becomes a Nature Reserve, then I recommend that this Department gives long term approval to the Kulin Shire Council to remove gravel and sand from the area delineated on the attached map. However, this permission should be dependent on the Kulin Shire Councilassuming responsibility for the rehabilitation of any area disturbed by extraction activities. Rehabilitation would include :-

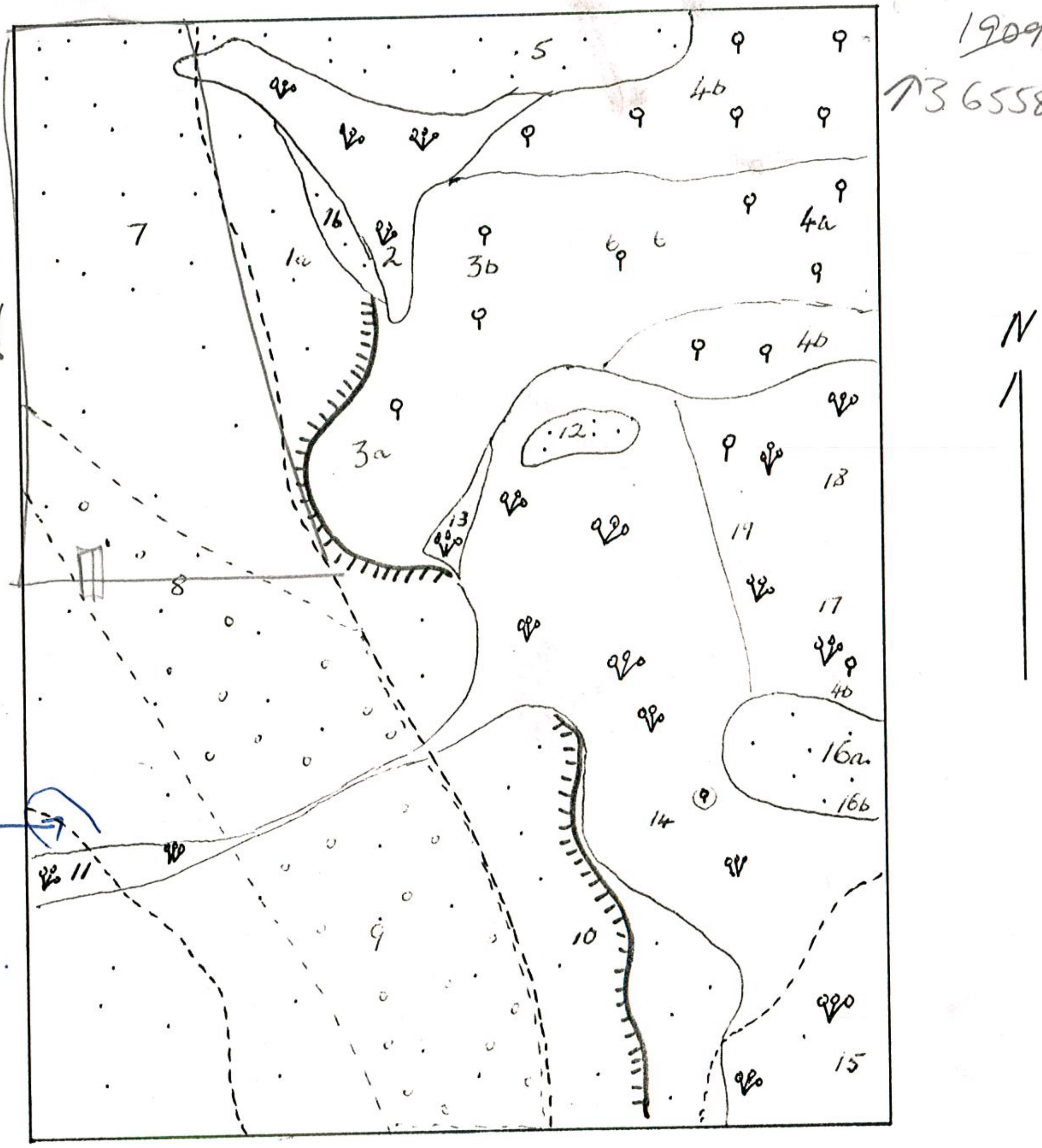
1) The storage of top-soil removed to obtain gravel;
2) The re-spreading of topsoil over areas from which gravel extraction is complete;
3) The ripping of the base of any pits after extraction is complete;
4) The battering of the walls of pits following gravel extraction;
5) Consultation with this Department (Reserve Management Officer) prior to carrying out rehabilitation work.

K J WALLACE
RESERVE MANAGEMENT OFFICER

January 10, 1980.

19099
↑36558

Proposed gravel pit!!!



Isop-polycph
B. Baxter.
B sphaer
lepto erub
Dry nive
Mel pus
Petro sq van.
Dry arm

Reserve Boundary

Track

Laterite Ridge

Boundary of Vegetation Association

SCALE 1cm = 100m

Heath

Mallee

Woodland

Burnt Heath

Plate 3 - Association 6

Plate 4 . Association 7

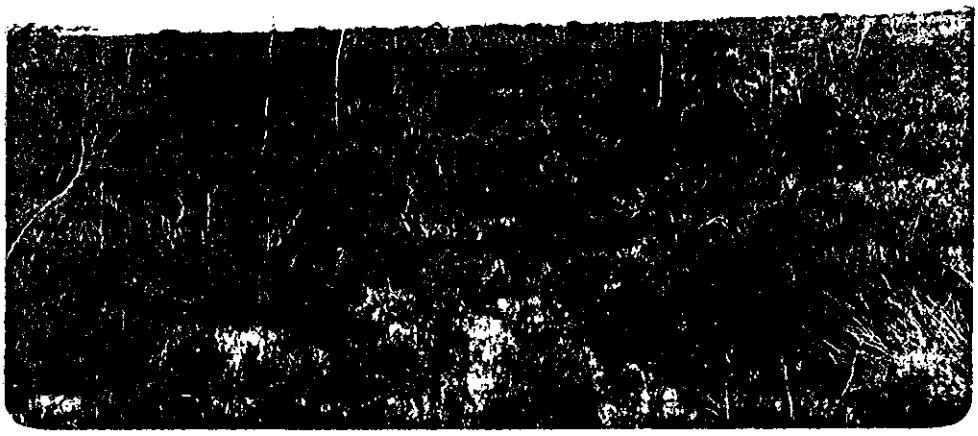


PLATE 5 - ASSOCIATION 8

PLATE 6 - ASSOCIATION 15